

Docket No. AUS920030532US1

**CLAIMS:**

What is claimed is:

1. A method in a data processing system for providing addresses to clients, the method comprising:
  - receiving a request from a client for an address;
  - determining whether authentication information is present in the request;
  - performing an authentication process using the authentication information if the authentication information is presenting the request;
  - determining whether the authentication information is authenticated; and
  - responsive to the authentication information being authenticated, providing a privileged address to the client.
2. The method of claim 1 further comprising:
  - responsive to the authentication information not being authenticated, providing a standard address to the client.
3. The method of claim 1, wherein the address is an Internet Protocol address.
4. The method of claim 1, wherein the authentication information is at least one of a pass phrase or a digital certificate.

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5. The method of claim 4, wherein the authentication process determines whether the pass phrase is a valid pass phrase.

6. The method of claim 4, wherein the authentication process determines whether the certificate is from a trusted authority and is valid.

7. A method in a data processing system for assigning addresses to clients, the method comprising:

- receiving a request from a client for an address;
- determining whether authentication information is present in the request;
- performing a verification process using the authentication information if the authentication information is presenting the request;
- determining whether the authentication information is verified;
- responsive to the authentication information being verified, providing an address to the client; and
- responsive to the authentication information not being verified, denying the request.

8. A data processing system for providing addresses to clients, the data processing system comprising:

- receiving means for receiving a request from a client for an address;
- first determining means for determining whether authentication information is present in the request;
- performing means for performing an authentication process using the authentication information if the authentication information is presenting the request;

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second determining means for determining whether the authentication information is authenticated; and

providing means, responsive to the authentication information being authenticated, for providing a privileged address to the client.

9. The data processing system of claim 8 further comprising:

providing means, responsive to the authentication information not being authenticated, for providing a standard address to the client.

10. The data processing system of claim 8, wherein the address is an Internet Protocol address.

11. The data processing system of claim 8, wherein the authentication information is at least one of a pass phrase and a digital certificate.

12. The data processing system of claim 11, wherein the authentication process determines whether the pass phrase is a valid pass phrase.

13. The data processing system of claim 11, wherein the authentication process determines whether the certificate is from a trusted authority and is valid.

14. A data processing system for assigning addresses to clients, the data processing system comprising:

receiving means for receiving a request from a client for an address;

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determining means for determining whether authentication information is present in the request;

performing means for performing an authentication process using the authentication information if the authentication information is presenting the request;

determining means for determining whether the authentication information is authenticated;

providing means, responsive to the authentication information being authenticated, for providing an address to the client; and

denying means, responsive to the authentication information not being authenticated, for denying the request.

15. A computer program product in a computer readable medium for providing addresses to clients, the computer program product comprising:

first instructions for receiving a request from a client for an address;

second instructions for determining whether authentication information is present in the request;

third instructions for performing an authentication process using the authentication information if the authentication information is presenting the request;

fourth instructions for determining whether the authentication information is authenticated; and

fifth instructions, responsive to the authentication information being authenticated, for providing a privileged address to the client.

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16. The computer program product of claim 15 further comprising:

sixth instructions, responsive to the authentication information not being authenticated, for providing a standard address to the client.

17. The computer program product of claim 15, wherein the address is an Internet Protocol address.

18. The computer program product of claim 15, wherein the authentication information is at least one of a pass phrase and a digital certificate.

19. The computer program product of claim 18, wherein the authentication process determines whether the pass phrase is a valid pass phrase.

20. The computer program product of claim 18, wherein the authentication process determines whether the certificate is from a trusted authority and is valid.

21. A computer program product in a data processing system for assigning addresses to clients

first instructions for receiving a request from a client for an address;

second instructions for determining whether authentication information is present in the request;

third instructions for performing an authentication process using the authentication information if the authentication information is presenting the request;

fourth instructions for determining whether the authentication information is authenticated;

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fifth instructions, responsive to the authentication information being authenticated, for providing an address to the client; and

sixth instructions, responsive to the authentication information not being authenticated, for denying the request.

22. A data processing system for providing addresses to clients, the data processing system comprising:

a bus system;

a memory connected to the bus system, wherein the memory includes a set of instructions;

a communications adaptor connected to the bus system; and

a processor unit connected to the bus system, wherein the processor unit executes the set of instructions to receive a request from a client for an address; determine whether authentication information is present in the request; perform an authentication process using the authentication information if the authentication information is presenting the request; determine whether the authentication information is authenticated; and provide a privileged address to the client in response to the authentication information being authenticated.

23. A method in a data processing system for assigning addresses to clients, the data processing system comprising:

a bus system;

a memory connected to the bus system, wherein the memory includes a set of instructions;

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a communications adaptor connected to the bus system; and

a processor unit connected to the bus system, wherein the processor unit executes the set of instructions to receive a request from a client for an address; determine whether authentication information is present in the request; perform an authentication process using the authentication information if the authentication information is presenting the request; determine whether the authentication information is authenticated; provide an address to the client in response to the authentication information being authenticated; and deny the request in response to the authentication information not being authenticated.